

10/539620

AMENDMENTS TO THE CLAIMS:

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A solid-state X-ray detector comprising :
a photosensitive sensor [(1)],
a scintillator [(5)], which converts the X-rays into radiation to which the sensor [(1)]
is sensitive, and
an entry window [(8, 9)] through which the X-rays upstream of the scintillator [(5)]
pass, ~~characterized in that~~
wherein the detector includes means for applying an electrical voltage between the entry
window [(8, 9)] and the photosensitive sensor [(1)].
2. (currently amended): The X-ray detector as claimed in claim 1, ~~characterized in that~~
wherein the scintillator [(5)] comprises :
a substrate [(8)] and
a scintillating substance [(7)],
~~in that~~ wherein the substrate [(8)] is separate from the sensor [(1)], and ~~in that~~ the
substrate [(8)] forms the entry window of the sensor [(1)].
3. (currently amended): The X-ray detector as claimed in claim 1, ~~characterized in that~~
wherein the scintillator [(5)] includes a scintillating substance [(7)], ~~in that~~ wherein the sensor
[(1)] is used as substrate for the scintillating substance [(7)], ~~in that~~ wherein a foil [(9)] for
protecting the scintillator [(5)] covers the scintillating substance [(7)] and ~~in that~~ wherein the
foil [(9)] forms the entry window of the sensor [(1)].
4. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]]
1, ~~characterized in that~~ wherein [[it]] the detector includes means for the voltage to be applied
substantially uniformly to the entry window [(8, 9)].

5. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]] 1, ~~characterized in that~~ wherein the electrical voltage is modulated over time.

6. (currently amended): The X-ray detector as claimed in ~~one of the preceding~~ claim[[s]] 1, ~~characterized in that~~ wherein an additional window [[(10)]] is placed on the scintillator [[(5)], without being fixed to the scintillator [[(5)]], and in that a moisture-impermeable seal [[(11)]] fixes the additional window [[(10)]] and the sensor [[(1)]].

7. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~ wherein the means for the voltage to be applied substantially uniformly comprise an electrical junction [[(20)]] passing through the additional window [[(10)]].

8. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~ wherein the means for the voltage to be applied substantially uniformly comprise a conducting passage [[(30)]] passing through the seal [[(11)]].

9. (currently amended): The X-ray detector as claimed in claim 6, ~~characterized in that~~ wherein the means for the voltage to be applied substantially uniformly comprise a track [[(40)]] made on the photosensitive sensor [[(1)]].

10. (new): The X-ray detector as claimed in claim 2, wherein the detector includes means for the voltage to be applied substantially uniformly to the entry window.

11. (new): The X-ray detector as claimed in claim 3, wherein the detector includes means for the voltage to be applied substantially uniformly to the entry window.

12. (new): The X-ray detector as claimed in claim 2, wherein the electrical voltage is modulated over time.

13. (new): The X-ray detector as claimed in claim 3, wherein the electrical voltage is modulated over time.

14. (new): The X-ray detector as claimed in claim 4, wherein the electrical voltage is modulated over time.

15. (new): The X-ray detector as claimed in claim 2, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

16. (new): The X-ray detector as claimed in claim 3, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

17. (new): The X-ray detector as claimed in claim 4, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.

18. (new): The X-ray detector as claimed in claim 5, wherein an additional window is placed on the scintillator, without being fixed to the scintillator, and in that a moisture-impermeable seal fixes the additional window and the sensor.